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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/750,432

Applicant(s)

NGUYEN, LYNH

Examiner

DOHM CHANKONG

Art Unit

2152

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5-9, 11-13 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-9, 11-13, and 37-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to Applicant's request for continued examination. Claim 1 is amended. Claims 38-40 are added. Claims 14 and 16-36 are canceled. Therefore, claims 1, 3, 5-9, 11-13, and 37-40 are presented for further examination.
2. This action is a non-final rejection.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/28/2008 has been entered.

Response to Arguments

4. Applicant has amended claim 1 by introducing two new limitations. The first limitation recites that the connection manager receives a request for the data source from the interface module and transmits an identifier of an available port module to the interface module. The second recites that the interface module connects directly with the port module based on the identifier. These limitations overcome the rejection under §103(a) over Polizzi, in view of Lamberton, in further view of DeBettencourt. This rejection is therefore withdrawn. The

references have been carefully considered in light of the amendments. The limitations do not overcome the Polizzi, in view of Albert, in further view of DeBettencourt.

Albert's service manager reads on the claimed connection manager, Albert's forwarding agent reads on the claimed interface module, Albert's server port reads on the claimed port module, and Albert's servers read on the claimed servers. With this framework in mind, Albert discloses that the service manager receives a connection request from the forwarding agent [abstract]. Albert then discloses that the service manager transmits an identifier of an available port module to the forwarding agent [column 7 «lines 1-22» where: the service manager sends an affinity key to the forwarding manager where the affinity key includes destination port number for a port on the server]. As to the second limitation, Albert further discloses that the forwarding agent connects directly with the port on the server using the received destination port number [column 4 «lines 11-14 and 37-40» where: the service manager directs the forwarding agent to connect to a particular server].

It would have been obvious to one of ordinary skill in the art to have incorporated Albert's features into Polizzi's remote source system. Albert discloses that one benefit of his system provides a better way of load balancing among the ports of different servers [column 3 «lines 61-67»]. Therefore, one of ordinary skill in the art would have been motivated to modify Polizzi in order to provide a more effective means of load balancing among the ports among a group of servers.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5-9, 11-14, 16-25, and 28-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polizzi, in view of Albert et al, U.S Patent No. 6.970.913 ["Albert"], in further view of DeBettencourt.

6. Regarding claims 1, 8, 19 and 31, Polizzi discloses a method, apparatus and program product (hereinafter a "system") comprising:

- providing at least one interface module to interface with a remote application (105, fig. 1);
- providing port module to interface between interface module and data source (agent, 130, fig. 1);
- providing a connection manager to facilitate between the interface module and port module (service broker 125 fig. 1; paragraph. 21).

Polizzi does not expressly disclose (1) wherein the connection manager receives a request for the data source from the interface module, and transmits an identifier of an available port module to the interface module; (2) connecting directly the interface module and the port module for communicating independently from the connection manager in subsequent communications;

or (3) the interface module connects directly with the port module based on the identifier transmitted by the connection manager. Polizzi also does not expressly disclose a log file comprising an arbitrary set of parameters selectively established to reflect a status of a connection between the remote application and the data source desired to be monitored.

As to (1), Albert discloses a service manager that receives a connection request from the forwarding agent [abstract] and that the service manager transmits an identifier of an available port module to the forwarding agent [column 7 «lines 1-22» where: the service manager sends an affinity key to the forwarding manager where the affinity key includes destination port number for a port on the server]. As to (2), Albert discloses that the forwarding agent connects directly with the port on the server using the received destination port number [column 4 «lines 11-14 and 37-40» where: the service manager directs the forwarding agent to connect to a particular server]. See the response to arguments section for the motivation to combine Albert with Polizzi.

As to (3), Albert discloses a system whereby a service manager is responsible for facilitating connections between a user's remote application and a data source such as a server [abstract]. Much like Applicant's claimed connection manager, Albert's service manager selects an appropriate data source and then facilitates a connection between the remote application and data source such that they can communicate independently of the load balancer [column 7 «lines 7-30»]. That is, after the connection has been facilitated, the user and the data source may connect directly with one another, independent of the service manager [Figure 2A | Figure 3A | Figure 3B | column 9 «lines 54-62» where : the service managers are not connected to the data source but merely facilitate the connection between the agent and the data source]. Albert's

service manager merely facilitates the connection between the user's remote application and the data source.

It would have been obvious to one ordinary skill in the art to modify Polizzi's system to incorporate Albert's teachings of utilizing a service manager to facilitate the initial connection to a data source but bypassing the manager on subsequent communications; specifically the combination would enable direct communications between Polizzi's network interface and agents independent of the service broker, freeing the service broker to provide capability of handling more requests to the data source. Such a modification in Polizzi's system would provide substantial improvement in Polizzi's service broker by providing a feedback mechanism to better select appropriate data sources [see Albert, column 4 «lines 7-18»]. Polizzi's service broker and Albert's load balancer are analogous as they both responsible for establishing connections between user and remote applications [see Polizzi, 0021 & Albert, column 4 «lines 52-65»].

7. As to the log file, DeBettencourt is directed to a system for accessing web pages from a data source [abstract | Figure 1]. Much like Polizzi, DeBettencourt discloses monitoring jobs that submitted to the data source [Figure 4]. DeBettencourt expressly discloses a log file comprising an arbitrary set of parameters selectively established to reflect a status of a connection between the remote application and the data source desired to be monitored [Figure 9 | column 5 «lines 25-39» | column 11 «lines 46-50» | column 18 «lines 12-17»].

It would have been obvious one of ordinary skill in the art to incorporate

DeBettencourt's teachings of a log file into Polizzi's system. DeBettencourt teaches several benefits of a log file such as the ability to recover from system failures [column 11 «lines 45-50»], logging of error events [column 11 «lines 63-65»], and analysis of network performance related to the connection [column 15 «lines 45-55»]. One would have been motivated to incorporate a log file into Polizzi for the benefits as described by DeBettencourt.

8. As to claim 3, Polizzi does not expressly disclose that the parameters are user-selectable. DeBettencourt discloses that the parameters in the log file are user-selectable [Figure 9 | column 18 «lines 25-26 and 46-47»]. It would have been obvious to one of ordinary skill in the art to incorporate user-selectable parameters in the log file into Polizzi. One would have been motivated to modify Polizzi in order enhance an administrator's ability to monitor the connections.

9. As to claim 5, Polizzi does not expressly disclose the parameters. DeBettencourt discloses wherein at least one the parameters is selected from the group consisting of a present SQL request, a warning message, an error message, a date, a time, a previous SQL request, a feature database scheme, and a number of records [column 18 «lines 18-51»]. It would have been obvious to one of ordinary skill in the art to incorporate user-selectable parameters in the log file into Polizzi. One would have been motivated to modify Polizzi in order enhance an administrator's ability to monitor the connections.

10. As to claims 6 and 7, Polizzi does not expressly disclose limiting the number of parameters. DeBettencourt discloses that the number of parameters within the log file can be configured, and therefore limited or expanded depending on the user's preference to reflect the history of interactions between the remote application and the data source [column 18 «lines 25-26 and 46-47»]. It would have been obvious to one of ordinary skill in the art to incorporate configurable parameters in the log file into Polizzi. One would have been motivated to modify Polizzi in order enhance an administrator's ability to monitor the connections.

It should be noted that, with respect to claims 6 and 7, the limitations "in order to reduce processing time of a request to the data source" and "to reflect a detailed history of interactions" are not given patentable weight because they merely "express[es] the intended result of a process step positively recited." See MPEP §2111.04. If a reference teaches limiting or expanding the number of parameters, that reference is capable of reducing the processing time of a request to the data source or reflecting the history of interactions. Therefore, DeBettencourt teaches the claimed limitation.

11. Regarding claims 9, Polizzi discloses the invention substantially, as claimed, as described, including hosting interface module is separate computer from data source. Polizzi does not explicitly disclose the interface is hosted in the data source computer. However, relocating interface module from other computer to data source computer is merely a part rearranging parts, which does not modify operation of the device, i.e., no matter where the interface module located it's connectivity to the port module still is being control by connection

manager, which court held that is unpatentable. *In re Japikse*, 18 F.2d 1019,86 USPQ 70 (CCPA 1950).

12. As to claim 11, as it does not teach or further define over the limitations of claim 5, claim 10 is rejected for at least the same reasons set forth for claim 5.

13. As to claim 12, Polizzi does not expressly disclose arranging the parameters in hierarchical relation. DeBettencourt teaches arranging the parameters in hierarchical relation [Figures 6, 9]. It would have been obvious to one of ordinary skill in the art to incorporate the display interface of DeBettencourt' log file into Polizzi. One would have been motivated to modify Polizzi in order enhance an administrator's ability to monitor the connections.

14. As to claim 13, Polizzi does not expressly disclose the at least one parameter of the arbitrary set of parameters corresponds to an output device selected by a user. DeBettencourt discloses at least one parameter of the arbitrary set of parameters corresponds to an output device selected by a user [column 18 «lines 34-51»]. It would have been obvious to one of ordinary skill in the art to incorporate the parameters of DeBettencourt' log file into Polizzi. One would have been motivated to modify Polizzi in order enhance an administrator's ability to monitor the connections.

15. As to claim 38, Polizzi does not expressly disclose a port module communicates independently with only one interface module at a time. However, such a feature was well known in the art at the time of Applicant's invention. For example, Albert discloses a port module communicates independently with only one interface module at a time [column 31 «lines 1-3» where: a user can independently budget how many connections are allowed for each port, thus allowing a user to set the number of connections to one]. It would have been obvious to one of ordinary skill in the art to have modified Polizzi to allow a user to modify the number of connections for a port of a server. One would have been motivated to have included such a feature into Polizzi to insure that servers receive the number of connections consistent with its capacity [Albert, column 30 «lines 61-65»].

16. As to claims 39 and 40, Polizzi does not expressly disclose the connection manager determines that the port module corresponding to the identifier transmitted to the interface module is not available to be assigned to another interface module nor does he disclose that the port module reports its availability to the connection manager. However, such features were well known in the art at the time of Applicant's invention. For example, Albert discloses that a connection manager determines that the port module corresponding to the identifier transmitted to the interface module is not available to be assigned to another interface module [column 4 «lines 41-65» | column 30 «lines 61-65»] and that the port module reports the availability to the manager [column 30 «lines 21-31»]. It would have been obvious to one of ordinary skill in the art to have modified Polizzi with Albert's features. One would have been motivated to have

included the ability to determine availability of server ports prior to establishing a connection into Polizzi to insure that connections can be properly handled by servers.

17. Claim 37 is rejected under 35 U.S.C §103(a) as being unpatentable over Polizzi, Albert, and DeBettencourt, in further view of Phaal, U.S Patent No. 6.138.159.

18. As to claim 37, Polizzi does not expressly disclose subsequent communication from the interface module to the port module is independent of the connection manager. Phaal is directed to a transparent load direction mechanism between multiple host computers. Phaal discloses a hand-off server that corresponds to Applicant's connection manager [Figure 2 «item 51»]. Phaal discloses that the hand-off server is only responsibly for controlling access to multiple servers and controlling disposition of requests to said servers [column 5 «lines 19-34»].

Specifically, Phaal discloses that after establishing the connection, subsequent communication from the client (interface module) to the server (port module) is independent of the hand-off server (connection manager) [column 5 «lines 19-49» where : “the session between the server and the client do not pass through the hand-off server. And the URL of the server is not displayed to the client thus preventing the user from being aware of the server's location (column 5 «lines 4-5»)].

It would have been obvious to one of ordinary skill in the art to have modified Polizzi to include Phaal's teachings. Such a combination would improve Polizzi's system by enabling direct communications between the server and the client which prevents the system from failing if the service manager fails.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dohm Chankong/
Examiner, Art Unit 2152

Application Number

Application/Control No.

09/750,432

Examiner

DOHM CHANKONG

Applicant(s)/Patent under
Reexamination

NGUYEN, LYNH

Art Unit

2152